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Application Serial No.: 10/748,943
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REMARKS

Reconsideration of the application is respectfully requested. Claims 1 and 7 have been amended.

Section 102 Rejections

Independent claims 1 and claims 3-6 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,565,649 to Tougeron (hereinafter "Tougeron"). This determination is respectfully traversed. Claims 1 and 7 have been amended. Claims 2 and 8 have been cancelled.

Independent claims 1 and 7 have been amended to recite that the cylindrical body of the present invention is solid from the cylindrical bore to the forward end. In contrast to the present invention, Tougeron discloses a projectile intended to carry a payload, and create a particular effect upon impact by the release of an irritating fluid in the vicinity of the point of impact, through the deformation or separation of the projectile upon impact. In order to perform its stated function, Tougeron discloses a forward nose housing a cavity designed to contain a liquid agent and thus is not solid. Applicant submits that Tougeron's disclosure of a 'solid nose' is specifically with reference to the area ahead of the cavity. Referring to Tougeron column 2, lines 56-57, Tougeron states "The skirt 3 defines a cavity 6 between the

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nose 2 and the base 4.” Clearly, the nose cannot be solid as Tougeron specifically states that cavity 6 is between the nose and the base.

In contrast, the present invention as recited in claims 1-6 is directed to an extended range munition having a projectile which includes a generally cylindrical body. The cylindrical body has a protruding member extending therefrom thereby increasing the weight of the body at the forward end. Moreover, amended independent claims 1 and 7 include the limitation of a solid body from the cylindrical bore to the forward end.

In comparing the Tougeron disclosure with the claims of the present invention, it is clear that Tougeron fails to disclose a projectile having a solid body from the cylindrical bore to the forward end. In fact, Tougeron discloses a cavity 6 between the nose and the base. Tougeron specifically discloses a hollow base for the inclusion of a motor or propellant device, describing how the propelling motor always remains connected to the projectile and can be fired from a launcher of simple design. In addition, Tougeron discloses that the payload is contained within a cavity within the body and is dispersed by the deformation or separation of the projectile body. The forward end of the Tougeron projectile is hollow and accommodates a liquid filling therein. The present invention as claimed in amended independent Claim 1 and 7 includes the limitation of a solid body from the cylindrical bore to

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the forward end for the projectile. This is in contrast to Tougeron, which clearly requires a cavity between the cylindrical bore and the forward end.

Accordingly, claims 1-6 include specifically recited elements which are not found in the disclosure in Tougeron. As such, as a matter of law, Tougeron cannot anticipate claims 1-6 of the present invention.

It is, therefore, respectfully submitted that claims 1-6, as well as the claims which depend therefrom, define patentably over Tougeron.

Claims 1-8 and 10-12 also stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,067,909 to Knoster, Jr. (hereinafter "Knoster"). This determination is respectfully traversed.

In contrast to the present invention, Knoster fails to disclose a less than lethal projectile with a convex forward end. Knoster teaches and discloses a sabot pressure wad adapted to receive a payload. Column 2, lines 63 -67, wherein the payload has a cover, Column 3, line 37. The cover is depicted in Figures 1-5 and 8-10 as being flat, with no concave or domed shape present as in the amended independent claims 1 and 7.

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Accordingly, claims 1-8 and 10-12 include specifically recited elements which are not found in the disclosure in Knostrer. As such, as a matter of law, Knostrer cannot anticipate claims 1-8 and 10-12 of the present invention.

It is, therefore, respectfully submitted that claims 1-8 and 10-12, as well as the claims which depend therefrom, define patentably over Knostrer.

Section 103 Rejections

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tougeron in view of U.S. Patent No. 6,615,739 to Gibson. This determination is respectfully traversed.

As noted above, Tougeron is deficient in that it fails to disclose a projectile having a cylindrical body that is solid from the cylindrical bore to the forward end. Moreover, Tougeron fails to show a protruding solid head, as claimed in amended independent claim 1 and independent claim 7. The Gibson reference fails to fill these deficiencies.

Gibson teaches that the purpose of the dimples are to initiate case rupture or enhance accuracy. Gas operated guns (paintball) operate at extremely low velocities, usually less than

300 fps. This type of projector (gun) has an extreme range of less than 30 yards. While Gibson claims that the dimples will permit improved rupture of paintballs and possibly enhance their accuracy. However, in accordance with the present invention, the use of dimples has a different purpose.

In the present invention, dimples are used to significantly reduce the surface area that comes in contact with the interior of the shotgun barrel. The applicants recognize that dimpling actually increases total surface area, but reduces actual surface available to friction. Reduced surface contact area on the slug reduces friction which in turn requires less propellant pressure to properly fly the slug at lower velocities. Having the ability to reduce velocity enhances the low lethality of the projectile. The reduction in total projectile weight caused by removing material when making the dimples also enhances the low lethality of the projectile at any given velocity.

Therefore, there would be no motivation to look to Gibson to add dimples to the present invention, as Gibson discloses dimples for a completely different purpose as in the present invention. Thus, Gibson fails as a reference as there would be no motivation to combine Gibson with Tougeron to arrive at the present invention.

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In establishing a *prima facie* case of obviousness, the cited references must be considered for the entirety of their teachings. *Bausch & Lomb, Inc. v. Barnes-Hind, Inc.*, 230 U.S.P.Q. 416, 419 (Fed. Cir. 1986). It is impermissible during examination to pick and choose from a reference only so much that supports the alleged rejection. *Id.* Thus, the express teachings of Gibson, which would lead one away from the invention defined by claim 9, may not be ignored during examination.

To arrive at the present invention as defined by claim 9, the Action not only ignored the express teaching of Gibson, but also engaged in hindsight reconstruction because none of the documents of record teach or suggest the process as claimed, as the cited references, i.e., Tougeron and Gibson, all require features not found in the present invention. It is well established that hindsight reconstruction of a reference does not present a *prima facie* case of obviousness and any attempt at hindsight reconstruction using Applicants' disclosure is strictly prohibited. *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1445-46 (Fed. Cir. 1993).

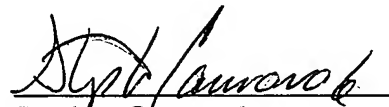
Thus, Tougeron and Gibson, individually or in combination, fail to teach the present invention as set forth in claim 9.

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Having responded in full to the present Office Action, it is respectfully submitted that the application, including claims 1-12, is in condition for allowance. Favorable action thereon is respectfully solicited.

Should the Examiner have any questions or comments concerning the above, the Examiner is respectfully invited to contact the undersigned attorney at the telephone number given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Stephen Cannavale", written over a horizontal line.

Stephen Cannavale
Registration No.: 44,585
Attorney for Applicant(s)

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(973) 331-1700